Supplement to February, 1936, issue, Vol. VI, No. 4.

TEXTILE RESEARCH
Vol. V, Nos. 1-12, 1934-35

Author Index
Subject Index
of
Abstracts, Research Reports,
Articles and Book Reviews

INDIANA UNIVERSITY
LIBRARY
FEB 8 1936

Official Publication
of
United States Institute for Textile Research, Inc.
Secretary's Office
65 Franklin St., Boston, Mass.

290090

TS1300
.T3

Textile Research

Vol. V, 1934–35

Abstracts

Author Index

PAGE

A

Abozin, V. G. Mercerization: Determination of the Degree of 427
Abramovitch, J. Evaluation of Auxiliary Products Used in the Textile Industry 116
Ahmad, Nazir. Cotton: Effect of Storage Prior to Ginning on the Spinning Quality of 509
Airoldi, A. Rayon: Identification of 112
Albien, G. Dyeing and Sizing of Sewing Thread 575
Alexander, Jerome. Dye and Fibre: Nature of the Combination Between 258
Andreas, F. and Korb, H. Bleaching of Yellow Silk in the Bast 218
Armand, L. Mildew of Wool 468
Aschan, O. and Schwalbe, A. Furole Dyestuffs: Further Studies in the 469
Astbury, W. T. Animal Hairs: Constitution of 157
Augustin, K. Chemical Testing of Wool 218

B

Babey, C. Vat Dyes: Use of—for Discharge Dyeing on Acetate Rayon 259
Balls, W. Lawrence. Moisture: Progress Note on Measurement of—in (Cotton) Bales by Radio Technic 385
Barker, Edgar H. Frosted Wool 510
Barker, S. G. Textiles in Terms of Bodily Comfort 572
Barr, M. and Edgar, R. Wool Keratin: Alkaline Decomposition of 570
Barrett, J. Wool: Determination of Sulfuric Acid in 516
Barsy, P. Dyeing Cellulose Acetate with Viscose Resist 575
Dyeing Mixed Viscose-acetate Fabrics in Blacks Fast to Washing 346
Dyeing of Union Albene-silk Fabrics 575
Bauer, W. Oil and Oil Spots 470
Bean, Percy. Dyeing and Finishing of Rayon .. 346
Becker, Burkhard. Moisture-absorption Ability of Textiles 579
Bedford, G. F. Colour Constancy of Materials 578
Belen'kii, L. I. Colloid-chemical Properties of Sulfur Dyes 574
Benzing, E. H. Regenerated Cellulose Fabrics: Causes of Faults Encountered in 345
Beretta, A. Cellulose Acetate Rayon: Special Dyes for the Direct Dyeing of 573
Berg, H. Wool Grease: Uses of 516
Bertsch, H. Plant Fibre: Action of Cation-active Fatty Substances Upon the 514
Billinghame, W. C. Jute Batching (or softening) 38
Biltz, Kurt. Dyeing Process: Effect of Water Containing Sulfite on the 347
Bird, C. L. Solvent Action of Trichloroethylene on Dyes 385
Bitzenhofer, O. Simple Method for Determining Qualifications and Skill of Young Workers for the Textile Industry 164

PAGE

Blanchard, F. S. and Jelleme, W. O. Supply-demand Balance 388
Bohanes, Anselm. Dye Suspensions for Printed Fabrics: Rapid Determination of Glycerol in 574
Bonicatti, M. Weighted Dyed Silk: Modified Method for the Determination of—by Ashing 386
Bonnet, L. Sulfonated Fatty Alcohols: Purity and Yield of 42
Toxicity of Artificial Dyes 513
Bonsma, F. N. and Joubert, P. J. Sulfur Content of Merino Wool—Its Distribution and Relation to Fineness and Quality 417
Borghetty, H. C. Rayon Warp Sizing 345
Bossuyt, V. and Gadenne, J. Flax Tows 254
Bothameley, J. Kier Boiling 470
Boulton, J. and Reading, B. Direct Dyes: Classification of—with Respect to Production of Level Dyeings on Viscose Rayon 424
Boxser, H. Textile Fibres in Thermal Insulation 342
Brandenburger, H. Artificial Fibres: Economic and Technical Importance of the New 377
Brandt, C. D. Cotton Twists. Simple Chart .. 300
Bravo, G. A. Dyes: Resistance of—to Ultra-violet Light 347
Fading of Dyestuffs under Ultra-violet Light, and Means of Making the Test 40
Bresser, A. Fibres: Preservatives for 253
Hydrogen Peroxide, Superoxides and Per Salts 382
Brosnan, W. F. Fireproofed Textiles 379
Brugere, A. Sizing Rayon Skeins: Troubles in 215
Bucherer, H. Tar Color Industry: Intermediates in the 512
Bump, C. K. Alpha-cellulose: Determination of 160
Burdette, L. A. Textile Mill Lighting 516
Burgess, R. Mildew on Wool: Causes and Prevention of 39
Wool: Preservation of—Against Harmful Insects 570
Burlet, E. Hygrometric Properties of Textiles and the Conditioning of Rayons 219
Burr, A. H. and M. S. Cellulose Acetate: Nature of the Dyeing Process in—and Hydrolytic Constant of Chrysoidine G 302

C

Caberti, L. Indigosols for Foulard Dyeing 41
Cahen, J. Polarization Strength of Fluorescent Light 260
Caldwell, S. A. G. Flax Fibre Structure and Quality. XIII 299
Flax Yarn Quality and Types 418
Campbell, W. B. Cellulose Pulps: Hydration and Beating of 37
Carbone, D. and Moggi, A. Flax and Hemp: Influence of Iron and Other Metals in the Microbiological Retting of 467
Caspe, J. and Austin, W. E. Fixation of Metal Ions by Animal Hair 40
Cattelain, E. Methylene Blue: Analysis of 382
Cerighelli, R. Flax Retting 467

PAGE

Cesconi, G. Wear Resistance of Textiles: New Apparatus for 386
Chace, W. N. Short Cut to Twist 345
Chinn, M. and Phelps, E. L. Silk Weighting .. 511
Chippindale, E. Acetylated Cotton 36
Chwala, A. Colloidal Electrolytes in the Textile Industry 423
Clark, C. H. Sizing: Partial Bibliography of .. 220
Clark, J. A. Fillers and Weighting Piece Goods 40
Rosins, Viscose, Etc. in Finishing Cotton Cloth 257
Clifford, A. T. and Cameron, F. K. Fibres: Dark-field Study of 378
Coordt, W. Linseed Oil Sizes. II 43
Courtney, W. D. and Schopp, R. Illumination Adapted to Photography and Low-power Microscopy: A New Source 303
Courtot, C. and Baron, A. Halogenation of Wool 467
Custers, J. F. H. Light-fastness: Apparatus for Study of 515

D

Daugherty, T. H. and Hjort, E. V. New Ultra-violet Microscope Illuminator 260
Davidson, J. Free Alkalis and the Determination of Hydrolytically Dissociated Alkali in Soaps: Methods of Determining 469
Debenedetti, E. (Viscose) Rayon and Insects .. 569
Delany, J. L. Skein Test: Discussion of the ... 345
Denham, W. S. and Dickinson, E. Stains to Distinguish Fibroin and Silk Gum 472
Denham, W. S., Hutton, E. A. and Lonsdale, T. Electrical Resistance of Yarns and Cloths .. 472
Derby, R. E. Wool Carbonizing Project: Review 417
Déribéré, M. Keratin: Structure of 467
Diemer, K. Interpretation and Value of the Load Extension Diagram 219
Doehner, H. Wool and Textile Fibres: New Method of Objectively Determining Fineness of 43
Dosne, H. Dyeing of Rayons in Mass 347
Downie, C. C. Cobalt: New Use for 423
Dultz, G. Plant Dyestuffs 384
Dunbar, C. Dyeing and Finishing: Modern Developments in Textile Chemicals for 424
Durst, G. Copper in Fabrics: Estimation of Small Quantities of 218
Impregnating with Cuprammonium 470

E

Eikhman, R. K. and Illyukevich, M. Y. Safranine T 576
Ekenstam, A. Cellulose Molecules: Structure .. 212
Ellinger, H. W. Spray Printing of Dyes 258
Engel, H. Bleaching for Light Shades 218
Erman, W. F. A. and Lord, W. M. Cuprammonium Hydroxide Solutions for Fluidity Determinations 385
Ershov, A. P. Dyes: Analysis of Intermediate Products in the Synthesis of Thioindigo 347
Evans, E. I. Antioxidant Properties of Vegetable Lecithin 573
Evans, J. Sizing, Desizing and Degumming with Enzymes 576
Evans, R. L. Chemical Conditioning Found Superior to Atmospheric in Recent Tests 300
Everest, A. E. and Wallwork, J. A. Azoic Colors 217

F

Faden, B. Woolen and Semi-woolen Goods: Washing of Dyed 160
Ferber, E. Acetate Rayon Dyeing: Principles and Practice of 422
Feubel, A. pH Control in Preparing Wool for Dyeing: Value of 383
Fischer, C. H. Rayon: Sizing of 419
Rayon Desizing Products: Composition 575

PAGE

Focke, R. Absolute Viscosity of High Viscosity Solution: Determination of the 162
Flowing of High Viscosity Liquids Through Rectangular Canals of Small Cross-section in Rayon 258
Folgner, R. and Schneider, G. Soluble Nitrogen in Wool: Determination of—by Sauer's Method 348
Forster, R. B. Dyes: Action of Hot Concentrated Sulfuric Acid on 469
Forster, T. A. Neolan Colors 383
Fothergill, J. B. Calico Printing: Progress in 218
Franke, H. Aniline Black Dyeing 217
Dyeing with Indigo and Other Vat Dyes ... 303
Rayon: Sizing Agents for 112
Franz and Mendrzyk. Wool: Determination of Fineness, Length and Crimp of Combed— 43, 387
Freitag. Synthesis of Natural Products 417
Freney, M. R. Merino Fleece. Chemistry of Suint 110
Frenzel, W. and Langer, K. Rayon in a Continuous Strand: Test of 115
Freytag, H. Photochemical Dyeing of Fabric. .. 384
Pyridine and Ultra-violet Light 41
Textile-chemical Studies. I, III 512
Fritsch, A. Dyeing Tula Fibre Shiny Black 469
Fu, W. Wool: Damage to—Caused by Acids ... 343
Furlonger, W. Dyeing with Wild Flowers 347

G

Garner, W. Color Blindness 425
Dye Solutions and Sols: Capillary Phenomena Exhibited by 114
Gattiker, C. Dyeing with Naphthol AS 469
Geier, H. Rayon Size 214
Genstein, E. S. and Newman, S. Sizing Compounds and the Sizing of Viscose and Acetate Yarn 419
Gerstner, H. Technical Dyeing of Surface-active Substances on the Naphthols of AS Series .. 259
Gibbons, J. T. Pyroxylin Coatings 379
Goldthwait, C. F. Direct Dyeing: Recent Review 257
Goodings, A. C. Wool: Effect of Temperature on the Moisture Regain of 569
Griboedov, D. N. and Abozin, V. G. Wool Fibres: Determination of Degree of Carbonization 428
Griboedov, D. N. and Veller, E. A. Wool Fibres: Simplified Analysis for Dyes on 514
Griffith, M. E., etc. Fading: Comparison of ... 255
Griffiths, L. H. and Neale, S. M. Absorption of Dyestuffs by Cellulose. IV 113
Grimshaw, A. H. Sizing Materials: Testing for Presence of Glue on Gelatin in 214
Gruz, J. and Rogovin, S. Spinning of Viscous Rayon by the Stretch Method 342
Guelke, R. and Fitzsimons, M. M. Dyes: Effect of—on Reflection of Light from Textiles ... 255
Guha, S. K. and Basu-Mallik, H. P. Indigoid Vat Dyes of the Isatin Series 382
Gulyaev, D. A. Methylene Gray Must Find an Application in Textile Industry 41
Günther, R. Latex in Textile Industry 256
Gurley, W. and L. E. Paper Smoothness Tester 44
Gutman, W. Biancal—A New Organic Compound for Textiles 218

H

Hall, A. J. Dyeworks Effluent Purification 258
Haller, R. and Okany-Schwarz, J. Dyes: Physical Condensation of—as a Means of Revealing the Fine Structure of Spun Fibres .. 253
Halperin, D., etc. Bleaching Cotton Cellulose with Solutions of Calcium and Sodium Hypochlorites: Comparative Experiments in 160

PAGE

Hambrock, H. A. and Wilken-Jorden, T. J. Dips and Dipping: Researches Into 110
Hampson, R. E. V. Fabric Structure and Launderability 255
Hannay, R. J. Detergent and Finishing Agents 574
Hanson, J. and Neale, S. M. Absorption of Dyestuffs by Cellulose. III 113
Harris, M. Carbonizing Process 422
Photochemical Decomposition of Silk 159
Wool: Effect of Alkalies on 571
Harris, M. and Kanagy, J. R. Amino Nitrogen Contents of Wool and Collagen 416
Hartmann, K. Wool Preservatives: Practical Experiences with 418
Haupt, K. Artificial Resin Industry in the Field of Synthetic Chemistry 217
Haworth, W. N. Cellulose: Constitution of 212
Hayashi, K. Dyes of the Benzopyrylium Type .. 161
Hays, M. B. and Viemont, B. M. Physical Properties of 44 Representative Household and Camp Blankets 418
Heinrich, C. Yarn and Twist Number by Graphical Means 162
Henning, H. J. Absorption of Acid by Wool ... 421
Herstein, K. M. Fluorescence Analysis 579
Herzog, A. Cross-cuttings in Artificial Fibres as a Result of Stretching 112
Rayons: Cross-sections of Stretched 113
Hess, K. Cinematographic Swelling Analysis ... 212
Hess, K. and Reidheimer, D. Absorption of Water by Fabrics: Determination of 300
Hewitt, J. T. Dyestuffs: Structure of 161
Hirsch-Pomerantz. Insoluble Product by Oxidation of *p*-Nitroaminophenol 41
Hirst, H. R. Faults in Wool Fabrics: Chemical Investigation of 469
Oils and Stains 256
Hishiyama and Nakamura. Mordanting of Silk with Chrome Alum. IV, V 470
Hoff, Paul. Woolen and Semi-woolen Material: Results Obtained with Alcohol Sulfonates in the Felting and Washing of 159
Holland, W. A. Synchronizing: New Method of Automatic 428
Holmes, J. F. Stain Removal: Modern Methods 380
Holt, J. Dyeing of Mixed Fabrics 425
Honegger, E. Ring Frame: Dynamical Studies 572
Hopkins, C. Y. Starch: Polarimetric Determination 515
Hotchkiss, J. F. Latex: Application of 468
Hotte, G. H. Fibre Candle 578
Huc, P. Bleaching Wool with Hydrogen Peroxide 422
Hunlich, R. Color Possibilities with Acetate Rayon 423
Delustering of Rayon 255
Dyeing of Mixed Textiles Containing Rayon with Particular Consideration of the Dyeing of Vistra-wool Mixtures 346
Dyeing of Mixed Textiles of Silk and Wool 425
Textile Raw Materials: New German 417
Transparent Effects on Silk 259
Hunter, R. S. Glossmeter 42
Hymot, C. Silk Screen-printing: Photographic Screens for 42

I

Il'inskii, M. A. Oxidation of Anthracene to Anthraquinone. Synthetic Anthraquinone .. 383
Ingmanson, J. H. and Vacca, G. N. Jute: Moisture Absorption of 426
Isles, E. Slubbing and Wool-yarn Dyeing 385
Itkina, A. and Plechan. Wool Damage: Physicochemical Methods for Determination of 516

J

Jaffard, R. M. Fibres and Their Solutions 510
Jäger, R. Wool: Effect of Sodium Hydroxide of Various Concentrations on 417

PAGE

Janák, F. Fibres of Hemp and Linen 299
Jaumann, A. Rayon Filaments: Sticking Together of 419
Jockers, W. Acid Milling of Mordant-dyed Woolens 255
Johnson, Geo. H., etc. Bleaching on the Whiteness and Tensile Strength of Cotton Fabrics: Influence of 257
Jones, Arthur. Cellulose Finishes on Silk and Other Fabrics 302
Jones, H. L. and Smith, J. E. pH of Surface Active Solutions of Textile Assistants 383
Justin-Mueller, E. Aniline Black: Composition, Reactions and Classification 217
Printing on Unchlorinated Silk without Special Humidification and without Yellowing the White in Steaming 471

K

Kaneko, H. Colloidal Behavior of Sericin. IV 377
Kaneko, H. and Nakazawa, Y. Domestic Cocoons: Behavior of Aqueous Solution of. XX, XXII 378, 416
Kaneko, H. and Yamamoto, K. *Ibid.*, XXI 416
Kapadia, D. F. Cotton Fibres: Physical Significance of Fundamental Technological Properties of—and Their Relation to Spinning Value 511
Katz, J. R. and Weidinger, A. Starch Solutions and Pastes: Heat Inhibition of Retrogradation 577
Kaufman, H. M. Tendering of Tin-weighted Silk During Printing: Causes of 512
Kehren. Balloon Fabrics 418
Emulsion Oleins 381
Kelly, A. J. Proofing of Textiles Against Water and Flame. I, II 379
Kern, R. Waterproof or Water-repelling Impregnation: Systematics and Criticisms of .. 580
Kershaw and Barrett. Cotton Bleaching: Review 302
Khmelnitzkaya and Verkhovskaya. Sodium Nitrite: Action of—on Sodium Polysulfide 42
Sulfur Black Dye Nigrosulfine: Structure .. 577
Knotinskii and Bogomolov. Iron in Technical Nigrosine: Determination of 426
Kimmel, E. Hydrolysis of Wool: Effect of Neutral Salts on the—with Acids and Bases ... 40
King, A. T. Fancy Colour and Weave Effects 379
Unshrinkable Finish 162
Klaus, R. Cellulose, Mercerized Cellulose and Cellulose Hydrate 212
Filament Formation: Theory of 110
Kline, G. M. Fire-resistant Doped Fabric for Aircraft 468
Moisture Relations of Aircraft Fabrics 301
Kling, R. Bleaching of Linen Yarn with Chlorine Liquors 218
Korte Bast-fibre Bleaching Process 382
Klinger, J. Microscopical Examination of the Products of the Rayon Industry 219
Rayon: Testing of 428
Klumph, E. W. Wetting-out Agents Used in Mercerizing 513
Köhler, S. Textile Fibres: Physical Methods for Testing of 386
Kollmann, L. Oxycellulose: Formation of—During Bucking in Air-containing Boilers 256
Königs, W. Moisture Content of Vistra and Vistra-crepe Yarns 382
Königs, W., etc. Strepto and Heterocyclo Polymethine Dyes from Furfural and its Vinylene Homologs 258
Konishi, Y. Dyeing: Problems in. I 575
Kosche, S. Rapid and Even Dyeing on Yarn-dyeing Machines 385
Textile Aids in Practice 512
Two-color Effects on Cotton Goods 513

PAGE

Kraemer, E. O. and Lansing, W. D. Celluloses: Molecular Weights of 37
Krais, P. Chemical and Molecular Structure of Textile Fibres 298
Textile Fibres: Reactions for Detection of Damage or Irregularities in 386
Krais, P. and Lüdicke, W. Moisture Contents of Crude Jute and Jute Yarn 379
Krais, Markert and Viertel. Wool Hairs: Changes Undergone by—During the Whole Manufacturing Process up to Finished Dyed Fabric 216
Krais and Viertel. Deterioration of Wool by Acids: New Microchemical Reaction for Detecting 116
Kraus, K. Wool Fineness in Staples 571
Krauter, G. Textile Investigations: Trends in .. 515
Textile Technological Testing upon Welfare of the Industry: Influence of 387
Krotova, N. A. Substantive Dyeing: Theory of 512
Kubota, J. Raw Silk: Physical Properties of .. 378
Kunz, A. H. and Price, C. Polarized Light 115
Kunz, M. A. Dyes of the Indanthrene Type ... 40
Küsebauch, K. Ramie and Flax Yarns: Simple Test to Distinguish Between 385
Rayon Yarns: Determination of Changes in Thickness of—Due to Stretching and Swelling 472
Yarns for Textures and Weaving 44

L

Lampe, W., etc. Substantive Dyes of the β-Diketone Type 512
Lancashire, J. B. Stitch Length Variation 428
Langer, K. and Bach, H. Insect Damage to Rayon Materials 159
Lantz, L. A. Light, Perspiration and Washing: Fixing Standards for 382
Lantz, R. Azine Dyes: Reactions Leading to Syntheses of 422
Lathrop, E. C. and Munroe, T. B. Crop Fibres: Industrial Preservation of 378
Lauer, K. Dyeing Rayon: Cause for Change in Tint 346
Lawrie, L. G. Chemical Assistants and Auxiliary Products 423
Lederer, H. Raw materials for Rayon Manufacture 342
Lenher, S. and Smith, J. E. Dyeing Cotton 424, 575
Leschellier, L. Deterioration of Viscose Dyed with Vat Dyes 424
Levshin, V. L. Absorption Spectra and Luminescence in Concentrated Solutions of Dyes ... 217
Linsenmeier, K. Dyeing of Staple Fibres and Mixed Yarns with Indanthrene Dyes 425
Loescher, M. Sulfur Chamber: Rational Modern 258
Lomanovich and Marker. Bleaching of Mixed Textiles of Cotton and Viscose 218
Lorenz, K. Calcium Soap: Formation of—and Its Prevention by Protective Colloids .. 422
Stability of Hydrogen Peroxide Baths During the Bleaching of Various Fibres ... 258
Lotze, H. Viscose: Determining of Ripeness and Theories of Ripening of 158
Viscose: Synaeresis and Other Physical Chemical Properties of 112
Lowry, Lowry and Miner. Silk: Specific Gravity, Diameter, Strength, Cohesion, etc. 215

M

MacDonald, A. D. and Maitland, H. B. Histamine: Examination of Cotton, Coir and Esparto-grass Dust for 299
Maki, T. Synthetic Dyestuffs: Recent Problems on Constitution of Some Important 259
Maki, T. and Nagai, Y. Vat Dyes of the Benzanthrone Series. VI 259

PAGE

Maki, T. and Suzuki, O. Anthraquinoneazo Compounds. VIII, IX 217
Malyutin, Kamuishev and Meshalkina. Dyeing Viscose without Preliminary Drying 347
Malyutin and Kantor. Dyeing Viscose 469
Mang, W. Exhaust Gases from a Viscose Rayon Factory with their Reactions and Recovery and Usefulness of Recovered Material 38
Manners, D. K. Phosphate Product: New 471
Markert, H. Wool: Resistance to Tearing and Tensile Strength of—Treated with Chemical Reagents 216
Marsh, M. C. Clothing Material: Interchange of Heat as Affecting 511
Marson, R. Direct Dyes: Assay of—by Precipitation 574
Martin, G. Dyeing and Printing Industries 161
Matsumoto, N. Viscose Rayon: Distance Between Micelles in 255
Viscose Rayon: Light-transmissibility of ... 343
Mauersberger, H. R. Elongation vs. Tension in Fine Denier Viscose Rayon Yarns 158
Slashing: How Much Stretch in Rayon? 215
McElroy, J. J. Stretch-out Calculations 420
McKay, R. W. Iodine Number of Wool 299
McNicholas, H. J. Reflective and Transmissive Properties of Diffusing Media 304
Mease, R. T. Wool: Determination of Sulphur and Sulphate in 164
Mease, R. T. and Jessup, D. A. Analysis of Textiles Containing Fibres in Mixture 577
Mebane, W. M. and O'Kelly, A. A. Dye Absorption of Cotton Fibres: Effect of Growth Conditions on 161
Mehta, C. M. Starch in Sizing and Finishing .. 577
Mell, C. D. Natural Dyestuffs: Sources of 383
Mereness, H. A. Silk and Rayon Piece-goods: Some Technical Considerations of the Problems Confronting the Manufacturer 345
Slippage in Silk and Rayon Broad Goods ... 420
Merolle, S. Rayon: On Rapid Identification of 115
Metais, B. Weighted Sizes: Application of 420
Metzl, H. Hard Spots in Printing Mordant Dyes with Gum Arabic 381
Michel, L. P. Mercerization: Determination of Degree of 427
Viscose: Action of Alkalies on 513
Michel-Jarrard, R. Fibres and Their Solutions .. 213
Molnar, A. Bleaching with Hydrogen Peroxide in Acid Baths 218
Damages in Wool 300
Desizing with Enzymes 574
Woolen Raincoat Textiles: Manufacture of 421
Morozov, A. A. Electrometric Method of Determination of Amino Dyes 472
Morton, T. H. Dyeing of Cellulose with Direct Dyestuffs 575
Morton, W. E. Strength of Fabrics 420
Mosher, H. H. Revivifying Used Boil-off Liquor for Additional Degumming Purposes 471
Mossini, A. Wool: Electrolytic Determination of Sulfur in 386
Mreule, L. Defects: Sources of—with Variamine Blue-reserve Articles 574
Müller, Bruno. Rayon: Sizing of 419
Mullin, C. E. Desizing of Cotton Goods 161
Mordanting, Weighting and Iron-proofing Acetate Rayon 382
Munzinger, W. M. Softening Materials 385

N

Neale, S. M. and Stringfellow, W. H. Cellulose: Absorption of Direct Dyes by 302
Neville, H. A. and Harris, M. Soap Solutions: Selective Adsorption from 576
Noechel, F. W. Wool Twists 420
Nowak, A. Printing of Silk and Rayon 384

O

Ohara, K. Rayon: Submicroscopic Structure of 380
Ohara, K. and Mizuno, R. Rayon: Studies on the Microstructure of—by Metachromasy .. 111
Ohl, Fritz. Artificial Fibres: Use of Gelatin for Production of 157
Rayon: Effect of Common Detergents on Properties of 385
Self-acting Washing Agents and Washing Aids (Bleich-soda) 511
Washing of Silk and Rayon: Use of "Bleaching Soda" Offer any Advantages in? .. 513
Yarns and Films of Cellulose Acetate 44
Oku, M. Domestic Cocoon: Coloring Matters of 378
Ostrozhinskaya, G. I. Direct Diazo Black S ... 424

P

Pakschwer, A. and Bunin, M. Flow of Viscose in Pipes 299
Pallas, V. E. Artificial Fabrics and Yarns 37
Palmer, A. Warp Breakage—Study of Its Importance and Elimination 381
Palmer, A. and Ramsdell, F. A. Shooting the Loom 380
Patel, A. M. Absorption of Direct Dyestuffs by Cellulose: Effect of Electrolytes 257
Absorption of Substantive Dyestuffs by Cellulose and Its Modifications 421
Pattee, C. L. Cotton Classer Finds a Valuable Tool in the Polarizing Microscope 218
Payne, R. W. Basic Dyes: Determination of—by Precipitation with Phosphotungstic Acid 422
Pearsall, G. M. and Harvey, N. D., Jr. Yarn Conditioning 421
Pennington, J. W. Silk and Rayon Crepe Yarns 576
Peper, J. P. Cotton Fabrics: Deterioration of—Finished with Magnesium Sulfate 379
Pettinger, A. H. Aluminum: Importance of—in Textile Technology 304
Pflumm, W. Defatting and Rinsing of Woolen Pieces 423
Rinsing and Washing Woolen Pieces 257
Pincass, H. Rayon: Determination of Contents of—in Mixed Textile Fabric 260
Pinte, J. Influence of Concentration on the Degradation of Colors by Light 382
Pinte, J. and Guimbretiere, L. Yarn: Regularigraph for 387
Porai-Koshitz, A. E. Dyeing Fibrous Materials: Process of. V, VII 346, 424
Dyeing Silk with Substantive Dyes. IV ... 347
Dyes: Bibliography of Russian Research on 39
Pötter. Rustproof Steels in Textile Industry ... 304
Pratt, F. C. Filling and Weighting Wool Textiles 40
Rubberized Textiles: Production of 257
Wool and Mildew 216
Preston, J. M. Minus Color in Textiles 344
Preston, J. M. and Freeman, K. Fibre Refractometer 573

Q

Quig, J. B. Rayon's Properties 419
Quality Rayon Fabrics: Necessary Background for Production of 344

R

Raeman, G. Wool: Logwood Black on 259
Wool: Solubilized Vat Dyes for 513
Rammer, G. Sizing of Rayon, Silk in Cotton Works 576
Reinert, G. C. Infra-red Photography 116
Microscopic Examination of Textiles 303
Reumuth, H. Chemical Examination of Textiles 510
Mercerizing Process under the Microscope .. 427
Micro-drawings, Photographs and Films in Textile Chemistry: Use of 219
Rhode, A. Waste Waters in Dye Works 162
Richter. Filling and Finishing Textiles 511
Oxygen Bleach 383
Roberts, H. C. Needle Oil and Its Relation to Full-fashioned Hoisery Knitting 418
Robinson, Conmar. Dyestuffs as Colloids 114
Roche, H. Rayon Yarns and Fabrics: Non-creasing 161
Rubber: Application of—to Rayon Yarns and Fabrics 468
Waterproofing Rayon Yarns and Fabrics 162
Weighting Silk and Rayon: Improved Methods 343
Roehrich, O. Twisting of Cotton Fibres 254
Rolland, J. Cellulose Acetate Fibres: Treating—in the Presence of Other Fibres 423
Dyestuffs: Effect of Dispersion and Solubility of—on Dyeing of Cellulose Acetate 347
Soap Solutions Used in Desizing 216
Rordorf, G. Lactic Acid Bacteria—Enemies of the Enzymic Removal of Starch 382
Rose, R. E. Essentials of Scientific Research Interpretation 220
Rossouw, S. D. and Wilken-Jorden, T. J. Sulfur in Wool: Studies on the Origin of. I 111
Rudolph, Georg. Celliton Fast Blue 3R 161
Dyeing of Rayon 346
Indigosol Blue IBC Teig 382
Indigosol Dyes for Dyeing Cotton 470
Sirius Dyes 385
Rudolph, Hans. Jute Fibres: Retting of 378
Ruggli, P. Dyes: Relation Between the Constitution and Substantivity of 347
Russina, H. Rayon and Oxygen Bleaching 385
Ryczynski, W. Cause of Dreaded Carbonizing Spots 301

S

Saito, G. Cellulose in Alkali: Swelling of. IV, V, VI, VII, VIII 377
Sakurada, I. and Shojino, M. Kinetics of Acetylation of Cellulose Fibres. IV 470
Salmony-Karsten, A. Rayon: Testing of 428
Saxl, I. J. Evenness Tester 218
Testing Results: Principle of Probability in Evaluation of 348
Schepmann, W. Sizing of Cuprammonium Rayon 215
Schickl, T. Dyeing of Rayon Yarn 425
Schiefer, H. F. and Cleveland, R. S. Hosiery-testing Machine: Factors Affecting Performance of Hosiery on 301
Schlechte, J. Streaks, Marks and Other Faults in Rayon Fabrics 345
Schmidt, K. Printing of Artificial Acetate Silks: Recent Advances in 384
Printing of Silk: Development of the 384
Scholefield, F. Dyeing and Finishing of Cotton 346
Schramek, W. Cotton Cellulose Fibre: Structure 509
Schreiterer, H. Sizing Rayon with Linseed Oil .. 214
Schumann, K. Raw Wool: Detergent Action and the Deterioration of—When Washed with Sodium Carbonate, Soap or Gardinol 157
Schütz, F. Direct Dyes: Application of—Which are Fast to Light 424
Schwarz, E. R. Importance of Interpretation to the Industry of Fundamental Textile Research 219
Scott, J. R. and Farrow, F. D. Cotton: Effect of Heat on Solution Viscosity of 379
Scott, W. M. Processing Research 515
Searle, G. O. Flax: New Process for Retting ... 467
Seem, W. P. and Andrew, T. Influence of Twist 571
Silk Hosiery Yarn: Influence of Twist on Diameter, Shortening and Dullness of .. 572
Seifart, H. Electricity and Rayon 158
Static Electricity in Working Rayon 158

PAGE

Sellars, W. B. Yarn Friction Tests 387
Sengoku, S. Alkaline Treatment of Cotton at Low Temperature 217
Setzer, R. Moisture of Fibres: New Process of Controlling the 416
Seyd, C. Sizing Rayon: New Method for Utilizing Strong Bone Glue for 469
Shilov, E. and Minaev, V. Chlorine Bleach. I 302
Simola, E. J. New Artificial Fibres and Their Use 569
Simonin, G. Waterproofing Fabrics by Means of Rubber 216
Singer, A. Dyes: Some Outstanding Events and Methods in Commercial Application of—on Cotton and Allied Fibres 347
Sisley, J. P. Rayon: Luster Dulling of 380
Solvents Utilized in the Textile Industry ... 512
Smith, H. DeW. Defects in Crêpe Fabrics 344
Sobue, H. and Hirano, Y. Wool Fibre: Chemical Treatments of. I, II, III 302, 418
Speakman, J. B. Animal Hairs: Constitution of 157
Speakman J. B. and Clegg, H. Wool: Some Relationships Between Chemical Constitution and Leveling Properties of Acid Dyes as Applied to 514
Speakman, J. B. and Stott, E. Chemical Theory of Dyeing: Contribution to the 423
Wool Keratin: Titration Curve of 418
Spindler, K. Rayon Crepe and Its Development 256
Spirk, L. Dyeing Cellulose Acetate 346
Staudinger, H. Cellulose: Constitution of 36
Highly Polymerized Compounds. Cellulose.. 254
Steffens, W. Pfühl Value 254
Steinberger, R. L. Textile Fibres: Stress-strain Relation in 37
Stenzinger, T. Waterproof or Water-repelling Impregnation 515
Steude, M. Cotton or Wood Cellulose? 213
Stierwalt, K. Indanthrene and Indigosol Dyes 470
Stiller, M. Apparatus for Rapid Determination of Surface Tension and Activity of Wetting Agents 578
Stirm, K. and Rouette, P. L. Wool Fibres: Effect of Heat on 570
Strong, J. H. Size Mixtures: Compounding 419
Suikhra, N. A. and Abramovich, S. G. Wool: Fast Green Dyeing on—with Schaeffer Salt 259
Sunder, H. Sensitivity of Substantive Colors to Calcareous Water: Method for Determining 348

T

Tagliani, G. Natural Silk: Survey of Dyeing, Printing and Finishing of 383
Takamatsu, Y. and Nomura, S. Alkaline Copper Solution on Silk Fibroin: Action of. IX, X 110
Tanemura, Kohne and Nishimura. Electrolytic Adsorption of Iron on Viscose Rayon and Other Fibres 40
Tanemura and Nishimura. Adsorption of Emulsion by Viscose Rayon 160
Tanizaki, T. Fibroin: Regeneration of. I 299
Tatu, H. Rayons: Use of Drying Oils for the Skein-sizing of 214
Thiebaut, R. Rubber Latex and Its Utilization in the Textile Field 572
Thom, Humfield and Holman. Mildew Resistance of Outdoor Cotton Fabrics: Laboratory Tests 260
Tippett, L. H. C. Yarn: Statistical View of ... 421
Toussaint, R. Dyeing: Variations in Critical Mean Luminosity in 346
Toyne, F. D. Waterproof Fabrics: Testing of .. 472
Toyoda, I. Degumming of Silk: Influence of Alkali Upon the. VII 213
Träger, K. Fluorescence Analysis: Progress in 426
Trillat, J. J. Cellulosic Compounds: Structure of. New Results Obtained by X-rays and Diffraction of Electrons 212

PAGE

Trotman, S. R. and Bell, H. S. Aqueous Solutions: Use of—of Bromine for the Production of Unshrinkable Finish on Knitted Woolen Goods 422
Dyeing of Chlorinated Wool 425
Tendered Silk: Viscosity Determination of Damage 580
Trotman, S. R., Bell, H. S. and Saunderson, H. Chlorinated Wool: Some Properties of 298
Trotman, S. R. and Horner, H. Dyeing Wool with Acid Dyes: Action of Sulphuric Acid in 114
Tumarkin, D. I. Viscosity: Some Simplifications in Procedure of Determining the—of Cuprammonium Solutions of Fibres 163
Tupholme, C. H. S. Thiourea Improves Fastness of Acetate 513
Turner, H. Wool Scouring 418
Turner, Nabar and Scholefield. Oxidizing Agents and Vat-dyed Cotton 471

U

Uchino, T. Silk Fibroin: Studies on the Partial Hydrolysis of 158
Ueno, S. and Suzuki, T. Naphthol Colors: Studies on. I 383
Quinoline Yellows: Studies on. I 384
Unsworth, R. C. Printing with Soledon Colors 471
Utaka, S. Chlorination of Wool 416

V

Valko, E. Dyestuffs: Measurements of Diffusion 575
Vallee, J. Washing Raw Wool in Acid Bath ... 343
Van Ess, M. W. and Edgar, R. Alkaline Hydrolysis of Cellulose Acetate Rayon 377
Vaskrisenski, P. I. Swelling of Viscose Films and Methods of Increasing Their Resistance to Water 342
Viertel, O. Wool: Chlorination and Deterioration 343
Volz, K. Dyed Cotton: How to Test—Quickly for its Color Fastness 426
von Hove, H. Wool: Processes in Reaction of Halogens Upon 513

W

Wahl, A. Vat Dyes: Effect of Light on Certain Wool: Isoelectric Point of 42
Walde, E. and Edgar, R. Acid and Alkaline Hydrolyses of Silk Fibroin 573
Walker, C. P. Starches: Materials and Methods for Solubilizing and Desizing 577
Walker, F. W. Dry Cleaning, Wet Cleaning and Dyeing 302
Walter, K. Rayon: Sizing of 214
Walther, O. A. Flax Fibre: Physiological Characteristics of 254
Webb, W. L. Optical Instruments Prove Valuable to Textile Industry 304
Webb, R. W., etc. Raw Cotton and the Yarn and Sheeting Manufactured from Three Grades of American Upland Cotton: Study of 112
Weickart, F. Printing by Photochemical Processes 384
Weilenmann, M. Moisture Determination in Raw, Boiled and Weighted Silk 579
Weinges, H. Elastic Properties of Viscose Rayon 38
Tear and Burst Resistance of Textile Fabrics: Comparative Investigations on 572
Weltzien, W. and Buchkremer, J. Rayon Threads Adhesion Measurement Apparatus 579
Weltzien, W. and Rhein, W. Adsorption and Release of Moisture of Fibrous Material on Air Humidity and Temperature: Dependence of 255

PAGE

Rayon: Simple Method of Determining the Uniformity of Titer of—on Continuous Thread 380
Rayon Filaments: Determination of Count Regularity of 428
Weltzien, W. and Schotte, A. Weighted Silk: Analysis of. II 115
Weltzien, Schotte and Corsten. Weighted Silk: Analysis of. I 43
Weltzien, W. and Schulze, K. Dyeing: Behavior of Delustered Rayons on 302
Dyeing: Behavior of Mat and Supermat Rayons 302
Wengraf, P. Flexible and Nonwrinkling Finishing Materials 256
Whitaker, A. H. Mono Azo Dyestuffs and Lake Colors and Their Applications 41
Pigments and Lake Colors and Their Application 41
Whittaker, C. M. Cellulose: Effect of Certain Vat Dyes on—When Exposed to Light and Atmospheric Influences 573
Dyeing of Rayons 346
Fastness in Textiles 38
Wigg, R. J. Freezing Process for Cleaning Wools of Foreign Matter 510
Williams, A. F. "Naphthol AS Dyeing" 383
Wilmet and Réglade. Cotton Mixed with Asbestos: Determination of 578
Winokuchi, K. Sulfonated Oils. XVI, XVII .. 512
Wolff, G. Viscosity of Size: Variations in 216
Wright, R. H. Cotton and Finish 300
Wu, S. M. Textile Printing Processes: Theory 577
Wulff, E. Silk Weighted with Tanning Matter 342
Wynn, A. A. Fused Collar 571

Y

Yorke, H. Wool: Manufacture of Artificial 570

Z

Zakoshchikov, A. Impurities in Plant Fibres ... 514
Zart, A. Cellulose: Viscosity and Molecular Weight 578
Zeidler, F. A. J. Höppler Viscosimeter 163

Research Reports and Articles
Author Index

PAGE

Bruner, E. and Goehring, M. Deterioration of Silks by Light of Different Wave-lengths ... 231
Campbell, M. S. Disposal and Recovery of Textile Waste Liquors 3, 240
Clark, C. H. B. W. I. R. A. Non-shrinkable Wool Process 252
Comments on Lee's Study of Cotton Spinning Irregularities 340
Elmquist, R. E. and Hartley, O. P. Methylene Blue Absorption as a Quantitative Measure of Wool Damage 149
Hougen, O. A. Silk Degumming, III 191
Haley, L. B. Effect of Wear and Laundering on Cotton Sheeting 263
Hardy, J. I. Determination of Fibre Fineness and Cross-sectional Variability 184
Kruegel, E. O. Top-quality Determinations: Note on Proposed Comparison Specifications for .. 337
Kise, M. A. Silk Fibroin Dispergation 401
Lee, R. L. Critical Study of Cotton Manufacturing Processes 167, 326
Mennerich, F. and Hougen, O. A. Diameter Ratio of Silk Filaments as Related to Two-tone Dyeing 223
Two-tone Dyeing as Related to the Shape and Size of Silk Filaments 475
Morey, D. R. Dichroism of Dyed Fibres as a Means of Studying Micellar Arrangement 105
Relation of Orientation to Physical Properties of Cottons and Rayons 483
Dichroism of Dyed and Stretched Wool Fibres and Its Use in Revealing Structure 538
Nutting, R. D. Interpretation of Data Obtained with Spectrophotometers of Polarizing Type 391
Osborne, G. G. Micro-analysis of Textile Fibres. II, III, IV 75,275, 307, 351, 431
Pattee, C. L. Use of Polarizing Microscope in Cotton Classing 72
Prindle, B. Microbiology of Textile Fibres. II, III, IV 11, 542
Rose, R. E. Essentials of Scientific Research Interpretation 58
Salley, D. J. Adsorption of Carbon Dioxide and of Water Vapor by Paper Pulp 493
Saxl, I. J. Some Dynamic Properties of Filamentous Materials 519
Testing the Crêpage of Yarns Before Weaving 32
Schwarz, E. R. Importance of the Interpretation of Scientific Textile Research 53
Schwarz, E. R. and Hotte, G. H. Micro-determination of Cotton Fibre Maturity in Polarized Light 370
Sisson, W. A. X-ray Analysis of Textile Fibres. III 119
Walde, E. C. and Edgar, R. Degradation of Silk Fibroin by Acid and Alkali 460
Walters, R. H. and Hougen, O. A. Silk Degumming. I 92
Wolfe, H. W. and Hougen, O. A. Silk Degumming. II 134

Book Reviews
Author Index

PAGE

A. A. T. C. C. 1933 Year Book 220
Chaudhury, N. C. Jute and Substitutes 388
Hathorne, B. L. Rayon Dyeing and Finishing .. 388
Hind, J. R. Woolen and Worsted Raw Materials 388
Mayer, F. Chemie der Organischen Farbstoffs .. 388
Nyman, R. C. and Smith, E. D. Union-management Co-operation in the "Stretch-out" ... 388
Peake, R. J. Cotton, from the Raw Material to the Finished Product 388

Textile Research

Vol. V, 1934–35

Abstracts

Subject Index

PAGE

A

Absolute Viscosity of High Viscosity Solution: Determination of the 162
Absorption and Release of Moisture of Fibrous Material on Air Humidity and Temperature: Dependence of 255
of Acid by Wool 421
of Direct Dyestuffs by Cellulose: Effect of Electrolytes on the 257
of Dyestuffs by Cellulose. III, IV 113
of Substantive Dyestuffs by Cellulose and Its Modifications 421
of Water by Fabrics: Determination of 300
Spectra and Luminescence in Concentrated Solutions of Dyes 217
Acetate: Thiourea Improves Fastness of 513
and Viscose Yarns: Sizing Compounds and the Sizing of 419
Rayon: Color Possibilities with 423
Mordanting, Weighting and Iron-proofing 382
Use of Vat Dyes for Discharge Dyeing on 259
Dyeing: Principles and Practice of 422
Acetylated Cotton 36
Acid: Absorption of—by Wool 421
and Alkaline Hydrolyses of Silk Fibroin ... 573
Bath: Washing Raw Wool in 343
Baths: Bleaching with Hydrogen Peroxide in 218
Dyes: Dyeing Wool with 114
Milling of Mordant-dyed Woolens 255
Acids: Damages to Wool Caused by 343
Adsorption: Selective—from Soap Solutions 576
of Emulsion by Viscose Rayon 160
Air Humidity and Temperature: Dependence of Absorption and Release of Moisture of Fibrous Material on 255
Aircraft Fabrics: Moisture Relations of 301
Alkali: Influence of—upon the Degumming of Silk 213
Swelling of Cellulose in. IV, V 377
Alkalies: Action of—on Viscose 513
Effect of—on Wool 571
Alkaline and Acid Hydrolyses of Silk Fibroin ... 573
Copper Solution on Silk Fibroin: Action of. IX, X 110
Decomposition of Wool Keratin 570
Hydrolysis of Cellulose Acetate Rayon 377
Treatment of Cotton at Low Temperature .. 217
Alpha-Cellulose: Determination of 160
from Aspen Trees 298
Aluminum: Importance of—in Textile Technology 304
Amino Dyes: Electrometric Method of Determination of 472
Nitrogen Contents of Wool and Collagen ... 416
Ammonium Chloride: Dyeing Silk with Substantive Dyes in the Presence of—and the Saturation Limit of Silk with these Dyes 347
Analysis of Textiles Containing Fibres in Mixture 577

PAGE

Aniline Black: Composition, Reactions and Classification 217
Dyeing 217
Animal Hair: Fixation of Metal Ions by 40
Hairs: Constitution of. I, II 157
Anthraquinoneazo Compounds. VIII, IX 217
Antioxidant Properties of Vegetable Lecithin 573
Apparatus for Rapid Determination of Surface Tension and Activity of Wetting Agents ... 578
Aqueous Solution of Domestic Cocoon: Behavior 416
Use of—of Bromine for the Production of the Unshrinkable Finish on Knitted Woolen Goods 422
Artificial Acetate Silks: Recent Advances in Printing of 384
Dyes: Toxicity of 513
Fabrics and Yarns, Silks, etc.: On the Manufacture of 37
Fibres: Cross-cuttings in 112
Economic and Technical Importance ... 377
Use of Gelatin for Production of 157
Resin Industry in the Field of Synthetic Chemistry 217
Wool: Manufacture of 570
Asbestos: Determination of Cotton Mixed with .. 578
Ashing: Modified Method for Determination of Weighted Dyed Silk by 386
Azine Dyes: Reactions Leading to Syntheses of .. 422
Azoic Colors 217

B

Balloon Fabrics 418
Basic Dyes: Determination of—by Precipitation with Phosphotungetic Acid 422
Bast: Bleaching of Yellow Silk in the 218
Biancal: A New Organic Compound for Textiles 218
Bleaching: Stability of Hydrogen Peroxide Baths During the—of Various Fibres 258
Cotton Cellulose with Solutions of Calcium and Sodium Hypochlorites: Comparative Experiments in 160
for Light Shades 218
of Linen Yarn with Chlorine Liquors 218
of Mixed Textiles of Cotton and Viscose ... 218
of Yellow Silk in the Bast 218
on the Whiteness and Tensile Strength of Cotton Fabrics: Influence of 257
with Hydrogen Peroxide in Acid Baths 218
Wool with Hydrogen Peroxide 422
Bone Glue: New Method for Utilizing Strong—for Sizing Rayon 469

C

Calcareous Water: Method for Determining Sensitivity of Substantive Colors to 348
Calcium and Sodium Hypochlorites: Bleaching Cotton Cellulose with Solutions of 160
Soap: Formation of—and its Prevention by Protective Colloids 422

PAGE

Calico Printing: Progress in 218
Capillary Phenomena Exhibited by Dye Solutions and Sols 114
Carbonization: Determination of Degree of—of Wool Fibres 428
Carbonizing: Treatment of Wool in One Operation Before 572
Process 422
Spots: Cause of the Dreaded 301
Celliton Fast Blue 3R 161
Cellulose: Absorption of Direct Dyes by 302
Absorption of Dyestuffs by. III, IV 113
of Substantive Dyestuffs by 421
Constitution of 36, 212
Dyeing of—with Direct Dyestuffs 575
Effect of Certain Vat Dyes on—When Exposed to Light and Atmospheric Influences 573
of Electrolytes on the Absorption of Direct Dyestuffs by 257
Viscosity and Molecular Weight 578
Acetate: Effect of Dispersion and Solubility of Dyestuffs on the Dyeing of 347
Nature of the Dyeing Process in—and the Hydrolytic Constant of Chrysoidine G 302
Some Newer Methods of Dyeing 346
Yarns and Films of 44
Fibres: Treating—in the Presence of Other Fibres 423
Rayon: Alkaline Hydrolysis of 377
Special Dyes for Direct Dyeing of 573
Fabrics: Causes of Faults Encountered in Regenerated 345
Fibres: Kinetics of the Acetylation of 470
Finishes on Silk and Other Fabrics 302
in Alkali; Swelling of. IV–VIII 377
Mercerized Cellulose and Cellulose Hydrate 212
Molecules: Structure and Size of 212
Pulps: Hydration and Beating of 37
Celluloses: Molecular Weights of 37
Cellulosic Compounds: Structure of 212
Cevenol Rayon Size: Application 573
Chemical and Molecular Structure of Textile Fibres 298
Assistants and Auxiliary Products 423
Conditioning Found Superior to Atmospheric in Recent Tests on Cotton Filling 300
Examination of Textiles: Various Cases of .. 510
Testing of Wool 218
Theory of Dyeing: Contribution to the 423
Treatments of Wool Fibre. III 302
Chlorinated Wool: Dyeing of 425
Some Properties of 298
Chlorination and Deterioration of Wool 343
of Wool 416
Chlorine Bleach. I. Theory of 302
Liquors: Bleaching of Linen Yarn with 218
Cinematographic Swelling Analysis 212
Cine Photo-micrography 163
Clothing Material: Interchange of Heat as Affecting 511
Cobalt: New Use for 423
Collagen and Wool: Amino Nitrogen Contents of 416
Colloid-Chemical Properties of Sulfur Dyes 574
Colloidal Behavior of Sericin. IV 377
Electrolytes in the Textile Industry 423
Colloids: Dyestuffs as 114
Color Analyzer: New Type 163
Blindness 425
Constancy of Materials: Testing the 578
Possibilities with Acetate Rayon 423
Copper in Fabrics: Estimation of Small Quantities of 218
Cotton: Acetylated 36
Alkaline Treatment of—at Low Temperature 217
Dyeing and Finishing of 346
Effect of Heat on Solution Viscosity of 379

PAGE

of Storage Prior to Ginning on the Spinning Quality of 509
and Allied Fibres: Some Outstanding Events and Methods in the Commercial Application of Dyes on 347
and Finish 300
Viscose: Bleaching of Mixed Textiles of 218
Bleaching: Review of 302
Microscope Test 425
Cellulose: Bleaching—with Solutions of Calcium and Sodium Hypochlorites ... 160
Fibre: Structure of the 509
Classer Finds a Valuable Tool in the Polarizing Microscope 218
Cloths: Rosins, Viscose, Etc. in Finishing .. 257
Fabrics: Deterioration of—Finished with Magnesium Sulfate 379
Influence of Bleaching on Whiteness and Tensile Strength of 257
Fibres: Dye Absorption of 161
Physical Significance of Fundamental Technological Properties of—and their Relation to Spinning Value .. 511
Twisting of 254
Filling: Chemical Conditioning Found Superior to Atmospheric in Tests 300
Goods: Desizing of 161
Two-color Effects on 513
Mixed with Asbestos: Determination of 578
or Wood Cellulose? 213
Twists. Simple Chart Shows Correct Turns 300
Crepe Fabrics: Defects in 344
Crop Fibres: Industrial Preservation of 378
Cross-cuttings in Artificial Fibres as a Result of Stretching 112
-sections of Stretched Rayons 113
Cuprammonium: Impregnating with 470
Hydroxide Solutions for Fluidity Determinations 385
Rayon: Sizing of 215
Solutions of Fibres: Determining Viscosity .. 163

D

Damages in Wool: Can the Chemical Analytical Methods of Detecting be Utilized in the Wool Trade? 300
Defatting and Rinsing of Woolen Pieces 423
Defects: Sources of—with Variamine Blue-Reserve Articles 574
in Crepe Fabrics 344
Degumming: Revivifying Used Boil-off Liquor for Additional—Purposes 471
Hosiery 38
of Silk: Influence of Alkali Upon the. VII 213
Sizing and Desizing with Enzymes 576
Delustered Rayons: Behavior of—on Dyeing ... 302
Delustering of Rayon 255
Desizing: Soap Solutions Used in 216
and Solubilizing Starches: Materials and Methods for 577
of Cotton Goods 161
Sizing and Degumming with Enzymes 576
with Enzymes 574
Detergent and Finishing Agents: New 574
Deterioration and Chlorination of Wool 343
of Viscose Dyed with Vat Dyes 424
of Wool by Acids: New Microchemical Reaction for Detecting 116
Diffuse Illumination Color Comparator and Reflector 426
Dips and Dipping: Researches into 110
Direct Diazo Black S: Study of Production of .. 424
Dyeing: Recent Review of 257
Dyes: Absorption of—by Cellulose 302
Application of—Which are Fast to Light 424
Assay of—by Precipitation 574

PAGE

Classification of—with Respect to Production of Level Dyeings on Viscose Rayon ... 424
Domestic Cocoon: Behavior of Aqueous Solution of ... 378, 416
Coloring Matters of the ... 378
Dry Cleaning, Wet Cleaning and Dyeing ... 302
Drying Oils: Use of—for Skein-sizing of Rayons 214
Dye Absorption of Cotton Fibres: Effect of Growth Conditions on the ... 161
and Fibre: Nature of Combination Between 258
Solutions and Sols: Capillary Phenomena ... 114
Suspensions for Printed Fabrics: Rapid Determination of Glycerol in ... 574
Dyed Cotton: How to Test—Quickly for Its Color Fastness ... 426
Dyeing: Behavior of Delustered Rayons on ... 302
Mat and Supermat Rayons in ... 302
Chemical Theory of ... 423
Problems in. I ... 575
Variations in Critical Mean Luminosity in 346
and Finishing: Modern Developments in Textile Chemicals for ... 424
of Cotton ... 346
of Rayon ... 346
and Printing Industries: Tendencies in ... 161
and Sizing of Sewing Thread ... 575
Cellulose Acetate: Some Newer Methods of 346
with Viscose Resist ... 575
Cotton: Indigosol Dyes for ... 470
Substantive Dyes and Salt Sensitivity .. 424
Dry Cleaning and Wet Cleaning ... 302
Fibrous Materials: Process of. V. VII 346, 424
Mixed Viscose-acetate Fabrics in Blacks Fast to Washing ... 346
of Cellulose with Direct Dyestuffs ... 575
of Chlorinated Wool ... 425
of Cotton: Particle Size and Substantivity .. 575
of Mixed Fabrics ... 425
of Mixed Textiles Containing Rayon with Particular Consideration of the Dyeing of Vistra-wool Mixtures ... 346
of Mixed Textiles of Silk and Wool ... 425
of Rayon ... 346
Cause for Change in Tint During the .. 346
of Rayons ... 346
in Mass ... 347
of Rayon Yarn ... 425
of Staple Fibres and Mixed Yarns with Indanthrene Dyes ... 425
of Union Albene-Silk Fabrics ... 575
Process: Effect of Water Containing Sulfite on the ... 347
Physical Condensation of Dyes ... 253
Silk with Substantive Dyes, in the Presence of Ammonium Chloride, and the Saturation Limit of Silk with These Dyes ... 347
Tula Fibre Shiny Black ... 469
Viscose ... 469
without Preliminary Drying ... 347
with Indigo and Other Vat Dyes: New Improved Method of ... 303
with Naphthol AS ... 469
with Wild Flowers ... 347
Wool with Acid Dyes: Action of Sulphuric Acid in ... 114
Dyes: Absorption Spectra and Luminescence in Concentrated Solutions of ... 217
Action of Hot Concentrated Sulfuric Acid on 469
Analysis of Intermediate Products in the Synthesis of Thio-indigo ... 347
Bibliography of Russian Research on ... 39
Effect of—on Reflection of Light from Textiles ... 255
Physical Condensation of—as a Means of Revealing the Fine Structure of Spun Fibres and the Nature of Dyeing Process ... 253

PAGE

of the Benzopyrylium Type: Spectrographic Investigation of. II ... 161
of the Indanthrene Type: Present State of Knowledge of ... 40
Relation Between Constitution and Substantivity of ... 347
Resistance of—to Ultra-violet Light and a Method of Examination ... 347
Solvent Action of Trichloroethylene on 385
Some Outstanding Events and Methods in the Commercial Application of—on Cotton and Allied Fibres ... 347
Special—for Direct Dyeing of Cellulose Acetate Rayon ... 573
Spray Printing of ... 258
Dyestuffs: Absorption of—by Cellulose ... 113
as Colloids ... 114
Effect of Dispersion and Solubility of—on the Dyeing of Cellulose Acetate ... 347
Fading of—under Ultra-violet Light ... 40
Measurements of the Diffusion of ... 575
Structure of ... 161
Dye Works: Clarification of Waste Waters in ... 162
Effluent Purification ... 258.

E

Elastic Properties of Viscose Rayon ... 38
Electrical Resistance of Yarns and Cloths: Measurement of ... 472
Electricity and Rayon ... 158
Electrolytes: Effect of—on the Absorption of Direct Dyestuffs by Cellulose ... 257
Electrolytic Adsorption of Iron on Viscose Rayon and other Fibres ... 40
Electrometric Method of Determination of Amino Dyes ... 472
Elongation Versus Tension in Fine Denier Viscose Rayon Yarns ... 158
Emulsion Oleins ... 381
Enzymes: Desizing with ... 574
Essentials of Scientific Research Interpretation .. 220
Evaluation of Auxiliary Products Used in the Textile Industry ... 116
Evenness Tester ... 218
Exhaust Gases from a Viscose Rayon Factory with Their Reactions and Recovery ... 38

F

Fabric: Photochemical Dyeing of ... 384
Structure and Launderability ... 255
Fabrics: Determination of Absorption of Water by ... 300
Estimation of Small Quantities of Copper in 218
Strength of ... 420
Fading: Comparison of the—Produced by the Fade-ometer and by Sunlight ... 255
of Dyestuffs under Ultra-violet Light, and a Means of Making the Test ... 40
Fallacy in Excess Worsted-drawing Steps ... 344
Fastness in Textiles ... 38
Faults in Rayon Yarns and Fabrics: Quick Tests for Certain Properties and Causes of ... 344
in Wool Fabrics: Chemical Investigation of 469
Felting and Washing of Woolen and Semi-woolen Material ... 159
Latest Explanation of ... 298
Fibre and Dye: Nature of the Combination Between ... 258
Candle ... 578
Refractometer ... 578
Fibres and Their Solutions: Relations Between the Intimate Structure and Mechanical Properties of ... 213, 510
Dark-field Study of ... 378
in Mixture: Analysis of Textiles Containing 577
New Process of Controlling the Moisture of 416
of Hemp and Linen: Differentiation Between 299

PAGE

Preservatives for ... 253
Yarn and Other Textiles: New Apparatus for Testing the Tensile Strength, Breaking Tension and Elasticity of ... 348
Fibroin and Silk Gum: Stains to Distinguish ... 472
Regeneration of. I ... 299
Filament Formation: Theory of ... 110
Fillers and Weighting Piece Goods ... 40
Filling and Finishing Textiles ... 511
and Weighting Wool Textiles ... 40
Finish and Cotton ... 300
Finishing Agents and Detergents: New ... 574
and Dyeing of Cotton ... 346
of Rayon ... 346
and Filling Textiles ... 511
Fireproofed Textiles ... 379
Fire-resistant Doped Fabric for Aircraft ... 468
Fixation of Metal Ions by Animal Hair ... 40
Flax: New Process for Retting ... 467
and Hemp: Influence of Iron and Other Metals in the Microbiological Retting of 467
and Ramie Yarns: Test to Dinstiguish ... 385
Fibre: Physiological Characteristics of ... 254
Structure and Quality. XIII ... 299
Retting ... 467
Tows: Structure of ... 254
Yarn Quality and Types ... 418
Flexible and Nonwrinkling Finishing Materials ... 256
Flow of Viscose in Pipes: On the ... 299
Flowing of High Viscosity Liquids Through Rectangular Canals of Small Cross-section in Rayon ... 258
Fluidity Determinations: Cuprammonium Hydroxide Solutions for ... 385
Fluorescence Analysis ... 579
Progress in ... 426
Fluorescent Light: Polarization Strength of ... 260
Foulard Dyeing: Indigosols for ... 41
Free Alkalis and the Determination of the Hydrolytically Dissociated Alkali in Soaps ... 469
Freezing Process for Cleaning Wools of Foreign Matter ... 510
Frosted Wool ... 510
"Fulscope" Time Schedule Controller ... 426
Furole Dyestuffs: Further Studies in the ... 469
Fused Collar ... 571

G

Gelatin: Testing for Presence of Glue on—in Sizing Materials ... 214
Use of—for the Production of Artificial Fibres 157
Glossmeter ... 42
Glue: Testing for Presence of—on Gelatin in Sizing Materials ... 214
Gum Arabic: Hard Spots in Printing Mordant Dyes with ... 381

H

Halogenation of Wool ... 467
Halogens: Processes in the Reaction of—Upon Wool ... 513
Hard Spots in Printing Mordant Dyes with Gum Arabic ... 381
Heat: Effect of—on Wool Fibres ... 570
Interchange of—as Affecting Clothing Material ... 511
Hemp and Flax: Influence of Iron and Other Metals in the Microbiological Retting of. IV ... 467
and Linen Fibres: Differentiation Between ... 299
Highly Polymerized Compounds. XCII. Constitution of Cellulose ... 254
Histamine: Examination of Cotton, Coir and Esparto-grass Dust for ... 299
Hoppler Viscosimeter ... 163
Hosiery Degumming ... 38

PAGE

Testing Machine: Factors Affecting the Performance of Hosiery on the ... 301
Human Hair as a Means for Measuring Moisture 303
Hydrogen Peroxide: Bleaching with—in Acid Baths ... 218
Bleaching Wool with ... 422
Baths: Stability of—During Bleaching of Various Fibres ... 258
Superoxides and Per Salts ... 382
Hydrolysis: Studies on the Partial—of Silk Fibroin ... 158
of Wool: Effect of Neutral Salts on the—with Acids and Bases ... 40
Hygrometric Properties of Textiles and the Conditioning of Rayons ... 219

I

Illumination Adapted to Photography and Low-power Microscopy: A New Source ... 303
Importance of Interpretation to the Industry of Fundamental Textile Research ... 219
Impregnating with Cuprammonium ... 470
Impurities in Plant Fibres: New Method for the Determination of Percentage of ... 514
Indanthrene and Indigosol Dyes: Innovations in the Field of ... 470
Type of Dyes ... 40
Indigoid Vat Dyes of the Isatin Series ... 382
Indigosol Blue IBC Teig ... 382
Dyes and Indanthrene ... 470
for Dyeing Cotton ... 470
Indigosols for Foulard Dyeing ... 41
Influence of Concentration on the Degradation of Colors (on dyed materials) by Light 382
of Twist ... 571
Infra-red Photography: Technique of ... 116
Insect Damage to Rayon Materials ... 159
Insoluble Product by Oxidation of *p*-Nitroaminophenol ... 41
Interpretation and Value of the Load Extension Diagram ... 219
Iodine Number of Wool ... 299
Iron: Electrolytic Adsorption of—on Viscose Rayon and other Fibres ... 40
in Technical Nigrosine: Determination of ... 426
Isoelectric Point of Wool ... 417

J

Jute: Moisture Absorption of ... 426
Batching (or softening) ... 38
Fibres: Retting of ... 378
Yarn: Moisture Contents of Crude Jute and 379

K

Keratin: Structure of ... 467
Kier Boiling ... 470
Kinetics of the Acetylation of Cellulose Fibres 470
Korte Bast-fibre Bleaching Process ... 382

L

Lactic Acid Bacteria—Enemies of the Enzymic Removal of Starch ... 382
Lake Colors and Mono Azo Dyestuffs and Their Application ... 41
Latex: Application of ... 468
in the Textile Industry ... 256
Launderability and Fabric Structure ... 255
Light: Effect of—on Certain Vat Dyes ... 42
Dyes on the Reflection of—from Textiles ... 255
Influence of Concentration on the Degradation of Colors by ... 382
fastness: Apparatus for Study of ... 515
Perspiration and Washing ... 382
Transmissibility of Viscose Rayon ... 343
Linen and Hemp Fibres: Differentiation Between 299
Yarn: Bleaching of—with Chlorine Liquors 218

PAGE

Linseed Oil: Sizing Rayon with 214
Sizes. II 43
Load Extension Diagram: Interpretation and Value of the 219
Luminescence and Absorption Spectra in Concentrated Solutions of Dyes 217
Luster Dulling of Rayon 380

M

Magnesium Sulfate: Deterioration of Cotton Fabrics Finished with 379
Mat and Supermat Rayons in Dyeing 302
Mercerization: Determination of Degree of 427
Mercerizing: Wetting-out Agents Used in 513
Process Under the Microscope 427
Merino Fleece. Chemistry of Suint 110
Wool: Sulfur Content of 417
Metachromasy: Studies on the Microstructure of Rayon by 111
Metal Ions: Fixation of—by Animal Hair 40
Methylene Blue: Analysis of 382
Gray Must Find Application in Textile Industry 41
Micelles: Distance Between the—in Viscose Rayon 255
Micro-Drawings, Photographs and Films in Textile Chemistry: Use of 219
Micro-Projector 427
Microscopic Examination of Textiles: New Optical Instruments for the 303
Microscopical Examination of Products of the Rayon Industry 219
Mildew and Wool 216, 468
on Wool: Causes and Prevention of 39
Resistance of Outdoor Cotton Fabrics 260
Minus Color in Textiles 344
Moist-air Drying of Warps in Sizing 213
Moisture Absorption Ability of Textiles 579
of Jute 426
and Temperature 255
Content of Vistra and Vistra-crepe Yarns ... 382
Contents of Crude Jute and Jute Yarn 379
Dependence of Absorption and Release of—of Fibrous Material on Air Humidity .. 579
Determination in Raw, Boiled and Weighted Silk 579
Human Hair as a Means for Measuring 303
of Fibres: New Process for Controlling 416
Progress Note on Measurement of—in (cotton) Bales by Radio Technic 385
Regain of Wool: Effect of Temperature on 569
Relations of Aircraft Fabrics 301
Molecular and Chemical Structure of Textile Fibres 298
Weight and Viscosity of Cellulose 578
Weights of Celluloses 37
Mono Azo Dyestuffs and Lake Colors and Their Application 41
Mordant-dyed Woolens: Acid Milling of 255
Mordanting of Silk with Chrome Alum. IV–V .. 470
Weighting and Iron-proofing Acetate Rayon 382

N

"Naphthol AS Dyeing": Recent Improvements in 383
Naphthol Colors: Studies On. I 383
Napthols of the AS Series: Action in Technical Dyeing of Surface-active Substances on 259
Natural Dyestuffs: Interesting Sources of 383
Silk: Survey of Dyeing, Printing and Finishing of 383
Needle Oil and Its Relation to Full-fashioned Hosiery Knitting 418
Neolan Colors 383
Neutral Salts: Effect of—on the Hydrolysis of Wool 40
New Artificial Fibres and Their Use 569
Ultra-violet Microscope Illuminator 260

PAGE

Noise and Efficiency of Weavers 516
Non-creasing Rayon Yarns and Fabrics 161
wrinkling and Flexible Finishing Materials 256

O

Oil and Oil Spots 470
Oils and Stains 256
Optical Instruments Prove Valuable to Textile Industry 304
Oxidation: Insoluble Product by—of *p*-Nitroaminophenol 41
of Anthracene to Anthraquinone 383
Oxidizing Agents and Vat-dyed Cotton 471
Oxycellulose: Formation of—During Bucking in Air-containing Boilers 256
Oxygen and Rayon Bleaching 385
Bleach 383

P

Paper Smoothness Tester 44
Pastes and Starch Solutions: Heat Inhibition of Retrogradation 577
Pfühl Value 254
pH Control in Preparing Wool for Dyeing: Value of 383
of Surface Active Solutions of Textile Assistants: Note on Colorimetric Determination of 383
Phosphate Product: New—for Textile Industry 471
Photochemical Decomposition of Silk 159
Dyeing of Fabric 384
Processes: Printing by 384
Photographic Screens for Silk Screen-printing ... 42
Photomicrographic Outfit 115
Photomicrographs of Silk Show Differences Between Pure-dyed and Weighted 344
Physical Properties of 44 Representative Household and Camp Blankets 418
Pigments and Lake Colors and Their Application 41
Plant Dyestuffs 384
Fibre: Action of Cation-active Fatty Substances Upon the 514
Impurities in 514
Polarization Strength of Fluorescent Light 260
Polarized Light: Identification and Rapid Check on Textile Fibres by Use of 115
Polarizing Microscope: Cotton Classer Finds a Valuable Tool in the 218
Printed Fabrics: Rapid Determination of Glycerol in Dye Suspensions for 574
Printing and Dyeing Industries: Tendencies in .. 161
by Photochemical Processes 384
Mordant Dyes: Hard Spots in—with Gum Arabic 381
of Artificial Acetate Silks 384
of Silk: Developments of the 384
of Silk and Rayon: Recent Requirements and Progress in the 384
on Unchlorinated Silk without Special Humidification and Without Yellowing the White in Steaming 471
with Soledon Colors 471
Processing Research 515
Projector: A New Textile 427
Proofing of Textiles Against Water and Flame .. 379
Pyridine and Ultra-violet Light: Applying Decorative Designs on Fabrics by Means of ... 41
Pyroxylin Coatings 379

Q

Quality Rayon Fabrics: Necessary Background for Production of 344
Quinoline Yellows: Studies on. I 384

R

Ramie and Flax Yarns: Simple Test to Distinguish Between 385

PAGE

Rapid and Even Dyeing on Yarn-dyeing Machines ... 385
Raw Cotton and the Yarn and Sheeting Manufactured from Three Grades of American Upland Cotton: Study of ... 112
Materials for Rayon Manufacture: Synthesis of ... 342
Silk: Physical Properties of ... 378
Wool: Detergent Action and Deterioration of —When Washed with Sodium Carbonate, Soap or Gardinol ... 157
Washing—in Acid Bath ... 343
Rayon and Electricity ... 158
and Oxygen Bleaching ... 385
and Silk: Washing of ... 513
and Silk Broad Goods: Slippage in ... 420
and Silk Crepe Yarns ... 576
and Silk Piece Goods: Technical Considerations ... 345
and Silk: Improved Methods of Weighting .. 343
and Silk: Recent Requirements and Progress in Printing of ... 384
Cause for Change in Tint During Dyeing .. 346
Crepe and Its Development ... 256
Delustering of ... 255
Desizing Products: Composition ... 575
Determination of Contents of—in Mixed Textile Fabric ... 260
Dyeing and Finishing of ... 346
Dyeing of ... 346
Mixed Textiles Containing ... 346
Effect of Common Detergents on Properties of ... 385
Fabrics: Necessary Background for Production of Quality ... 344
Streaks, Marks and Other Faults in ... 345
Filaments: Determination of Count Regularity of ... 423
Sticking Together of ... 419
Flowing of High Viscosity Liquids Through Rectangular Canals of Small Cross-section in ... 258
How Much Stretch in ... 215
Identification of ... 112, 260
in a Continuous Strand: Test of ... 115
Industry: Microscopical Examination of the Products of ... 219
Luster Dulling of ... 380
Manufacture: On Synthesis of Raw Materials for ... 342
Materials: Insect Damage to ... 159
On Rapid Identification of Different Types of Properties ... 115
Silk: Sizing of—in Cotton Works ... 419
Simple Method of Determining the Uniformity of the Titer of—on Continuous Thread ... 576
Size ... 380
Sizing Agents for ... 214
Sizing of ... 112
Sizing—with Linseed Oil ... 214, 419
Skeins: Some Troubles in Sizing ... 214
Static Electricity in Working ... 215
Studies on Microstructure of—by Metachromasy ... 158
Submicroscopic Structure of ... 111
Testing of ... 380
Threads Adhesion Measurement Apparatus .. 428
Warp Sizing ... 579
Yarn: Dyeing of ... 345
Notes on Sizing of ... 425
Yarns: Determination of Changes in Thickness of—Due to Stretching and Swelling ... 214
and Fabrics: Application of Rubber to Non-creasing ... 472
Quick Tests for Certain Properties and Causes of Faults in ... 468
Waterproofing ... 161
Rayons: Cross-sections of Stretched ... 344
Dyeing of ... 162
Hygrometric Properties of Textiles and the Conditioning of ... 113
Use of Drying Oils for the Skein-sizing of .. 346, 347
Yarns and Fabrics: Quick Tests for Certain Properties and Causes of Faults in 219
Reflective and Transmissive Properties of Diffusing Media: Equipment for Measuring the 214
Regenerated Cellulose Fabrics: Causes of Faults 348
Retting of Jute Fibres ... 304
Revivifying Used Boil-off Liquor for Additional Degumming Purposes ... 345
Ring Frame: Dynamical Studies ... 378
Rinsing and Defatting of Woolen Pieces ... 471
Washing Woolen Pieces ... 572
Rosins, Viscose, etc., in Finishing Cottons ... 423
Rubber: Application of—to Rayon Yarns and Fabrics ... 257
Latex and Its Utilization in Textile Field .. 257
Waterproofing Fabrics by Means of ... 468
Rubberized Textiles: Production of ... 572
Rustproof Steels in the Textile Industry ... 216
257
304

S

Safranine T ... 576
Self-acting Washing Agents and Washing Aids .. 511
Sensitivity of Substantive Colors to Calcareous Water: Method for Determining ... 348
Sericin: Colloidal Behavior of. IV ... 377
Shooting the Loom ... 380
Short Cut to Twist ... 345
Silk and Rayon: Improved Methods of Weighting 343
Recent Requirements and Progress in Printing of ... 384
Washing of ... 513
Broad Goods: Slippage in ... 420
Crepe Yarns ... 576
Piece-Goods: Some Technical Considerations of Problems Confronting the Manufacturer ... 345
and Wool: Dyeing of Mixed Textiles of 425
Cellulose Finishes on—and Other Fabrics .. 302
Development of the Printing of ... 384
Fibroin: Acid and Alkaline Hydrolyses of .. 573
Action of Alkaline Copper Solution on 110
Studies on Partial Hydrolysis of ... 158
Gum and Fibroin: Stains to Distinguish 472
Hosiery Yarn: Influence of Twist on Diameter, Shortening and Dullness of ... 572
Influence of Alkali Upon Degumming of ... 213
Moisture Determination in Raw, Boiled and Weighted ... 579
Mordanting of—with Chrome Alum ... 470
Photochemical Decomposition of ... 159
Photomicrographs of—Show Differences Between Pure-dyed and Weighted ... 344
Rayon: Sizing of—in Cotton Works ... 576
Screen-Printing: Photographic Screens for .. 42
Specific Gravity, Diameter, Strength, etc. .. 215
Transparent Effects on ... 259
Weighted with Tanning Matter ... 342
Weighting ... 511
Simple Method for Determining Qualification and Skill of Young Workers for Textile Industry 164
Sirius Dyes ... 385
Size Mixtures: Compounding ... 419
Variations in Viscosity of ... 216
Sizing Agents for Rayon ... 112
and Dyeing of Sewing Thread ... 575
and Finishing: Starch in ... 577
Compounds and the Sizing of Viscose and Acetate Yarns: Manufacture of ... 419
Desizing and Degumming with Enzymes 576
Materials: Testing for Presence of Glue on Gelatin in ... 214

PAGE

Moist-air Drying of Warps in 213
Notes on 419
of Cuprammonium Rayon 215
of Rayon 214, 419
of Rayon, Silk in Cotton Works 576
of Rayon Yarn: Notes on 214
Partial Bibliography of 220
Rayon: New Method for Utilizing Strong Bone Glue for 469
Skeins: Some Troubles in 215
Warp 345
with Linseed Oil 214
Skein-sizing of Rayons: Use of Drying Oils for Test: Discussion of the 214 345
Slashing: How Much Stretch in Rayon? 215
Slippage in Silk and Rayon Broad Goods 420
Slubbing and Wool-yarn Dyeing 385
Soaps: Methods of Determining Free Alkalis and Determination of Hydrolytically Dissociated Alkali in 469
Soap Solutions: Selective Adsorption from 576
Used in Desizing 216
Sodium Hydroxide: Effect of—of Various Concentrations on Wool 417
Hypochlorites and Calcium: Bleaching Cotton Cellulose with Solutions of 160
Nitrite: Action of—on Sodium Polysulfide .. 42
Polysulfide: Action of Sodium Nitrite on ... 42
Softening Materials: Technology of 385
Soledon Colors: Printing with 471
Solubilizing and Desizing Starches: Materials and Methods for 577
Soluble Nitrogen in Wool: Determination of 348
Solvent Action of Trichloroethylene on Dyes 385
Solvents Utilized in the Textile Industry 512
Spectrographic Investigation of Dyes of the Benzopyrylium Type 161
Spinning of Viscous Rayon by Stretch Method ... 342
Quality of Cotton: Effect of Storage Prior to Ginning on the 509
Value of Cotton Fibres 511
Spray Printing of Dyes 258
Spun Fibres: Revealing the Fine Structure of ... 253
Stability of Hydrogen Peroxide Baths During the Bleaching of Various Fibres 258
Stain Removal: Modern Methods of 380
Stains and Oils 256
to Distinguish Fibroin and Silk Gum 472
Starch in Sizing and Finishing: "Aktivin S" 577
Lactic Acid Bacteria—Enemies of the Enzymic Removal of 382
Polarimetric Determination 515
Solutions and Pastes: Heat Inhibition of Retrogradation 577
Starches: Materials and Methods for Solubilizing and Desizing 577
Static Electricity in Working Rayon 158
Stitch Length Variation: Analysis of 428
Streaks, Marks and Other Faults in Rayon Fabrics 345
Strength of Fabrics 420
Strepto and Heterocycle Polymethine Dyes from Furfural and Its Vinylene Homologs 258
Stress-strain Relation in Textile Fibres 37
Stretch Method: Spinning of Viscous Rayon by .. 342
Stretch-out Calculations 420
Stretching and Swelling: Determination of Changes in Thickness of Rayon Yarns Due to 472
Substantive Dyeing: Theory of 512
Dyes of the β-Diketone Type 512
Sulfite: Effect of Water Containing—on the Dyeing Process 347
Sulfonated Fatty Alcohols: Purity and Yield of 42
Oils: XVI, XVII 512
Sulfur: Electrolytic Determination of—in Wool .. 386
Black Dye Nigrosulfine: Structure of 577
Chamber: Rational Modern 258
Content of Merino Wool: Its Distribution and Relation to Fineness and Quality .. 417

PAGE

Dyes: Colloid-chemical Properties of 574
in Wool: Studies on the Origin of the. I .. 111
Sulfuric Acid in Wool: Determination of 516
Sulphate and Sulphur in Wool 164
Sulphur and Sulphate in Wool 164
Sulphuric Acid: Action of—in Dyeing Wool with Acid Dyes 114
Supply-demand Balance 388
Swelling and Stretching: Determination of the Changes in Thickness of Rayon Yarns Due to 472
of Cellulose in Alkali. IV, V 377
of Viscose Films and Methods of Increasing their Resistance to Water 342
Synchronizing: New Method of Automatic 428
Synthesis of Natural Products: New Ways Towards 417
Synthetic Dyestuffs: Recent Problems on Constitution of Some Important 259

T

Tanning Matter: Silk Weighted with 342
Tar Color Industry: Intermediates in the 512
Tear and Burst Resistances of Textile Fabrics .. 572
Technical Dyeing of Surface-active Substances on the Naphthols of the AS Series 259
Temperature Controller: New Type of Self-operating 43
Tendered Silk: Viscosity Determination of Damage 580
of Tin-weighted Silk During Printing 512
Tensile Strength: Influence of Bleaching on the Whiteness and—of Cotton Fabrics 257
New Apparatus for Testing 348
Testing Results: Principle of Probability 348
the Tensile Strength, Breaking Strength and Elasticity of Fibres, Yarn and other Textiles: New Apparatus for 348
Textile Aids in Practice 512
Chemical Studies. I, III 512
Fibres in Thermal Insulation 342
Physical Methods for Testing of .. 386
Reactions for Detection of Damage 386
Stress-strain Relation in 37
Investigations: Trends in 515
Mill Lighting 516
Printing Processes: Theory in 577
Raw Materials: New German 417
Technological Testing Upon Welfare of the Industry: On the Influence of 387
Textiles: Fastness in 38
in Terms of Bodily Comfort 572
Minus Color in 344
Moisture-absorption Ability of 579
New Apparatus for Wear Resistance of 386
Thermal Insulation: Textile Fibres in 342
Thiourea Improves Fastness of Acetate 513
Tin-weighted Silk: Tendering of—During Printing 512
Toxicity of Artificial Dyes 513
Transparent Effects on Silk 259
Twist and Yarn Number by Graphical Means ... 162
Influence of 571
Short Cut to 345
Twisting of Cotton Fibres 254
Two-color Effects on Cotton Goods 513

U

Ultra-violet Light and Pyridine: Applying Decorative Designs on Fabrics by Means of 41
Fading of Dyestuffs Under 40
Resistance of Dyes to 347
Unchlorinated Silk: Printing on 471
Union Albene-silk Fabrics: Dyeing of 575
Unshrinkable Finish 162
on Knitted Woolen Goods: Use of Aqueous Solutions of Bromine for Production of 422
Wool Yarns and Fibres 380

V

Vat-dyed Cotton and Oxidizing Agents 471
Dyes: Deterioration of Viscose Dyed with .. 424
Effect of Certain—on Cellulose 573
Effect of Light on Certain 42
of the Benzenthrene Series. VI 259
Solubilized—for Wool 513
Use of—for Discharge Dyeing on Acetate Rayon 259
Vegetable Lecithin: Antioxidant Properties of ... 573
Viscose: Action of Alkalies on 513
and Acetate Yarns: Sizing Compounds and the Sizing of 419
and Cotton: Bleaching of Mixed Textiles of 218
Deterioration of—Dyed with Vat Dyes 424
Determining of Ripeness and Theories of ... 158
Dyeing 469
without Preliminary Drying 347
Films: Swelling of—and Methods of Increasing Their Resistance to Water 342
On the Flow of—in Pipes 299
Rayon: Adsorption of Emulsion by 160
and Insects 569
and Other Fibres: Electrolytic Adsorption of Iron on 40
Distance Between the Micelles in 255
Elastic Properties of 38
Factory: Exhaust Gases from 38
Light-transmissibility of 343
Yarns: Elongation vs. Tension in Fine Denier 158
Resist: Dyeing Cellulose Acetate with 575
Rosins, Etc., in Finishing Cotton Cloths ... 257
Synaeresis and Other Physical Chemical Properties of 112
Viscosity and Molecular Weight of Cellulose 578
Determination of Damage in Tendered Silk 580
of Cotton: Effect of Heat on the Solution 379
of Size: Variations in the 216
Some Simplifications in Procedure of Determining the—of Cuprammonium Solutions of Fibres 163
Viscous-Acetate Fabrics: Dyeing Mixed—in Blacks Fast to Washing 346
Rayon: Spinning of—by the Stretch Method 342
Vistra and Vistra-Crepe Yarns: Moisture Content 382
-wool Mixtures: Dyeing of Mixed Textiles Containing Rayon 346

W

Warp Breakage—A Study of Its Importance and Elimination 381
Warps: Moist-air Drying of—in Sizing 213
Washing and Rinsing Woolen Pieces 257
of Dyed Woolen and Semi-woolen Goods ... 160
of Silk and Rayon: Use of Bleaching Soda .. 513
Raw Wool in Acid Bath: Advantages and Realization 343
Waste Waters in Dye Works: Clarification of ... 162
Water: Determination of Absorption of—by Fabrics 300
Effect of—Containing Sulfite on Dyeing Process 347
Swelling of Viscose Films and Methods of Increasing Their Resistance to 342
Waterproof Fabrics: Testing of 472
or Water-repelling Impregnation 515, 580
Waterproofing Fabrics by Means of Rubber 216
Rayon Yarns and Fabrics 162
Water-repelling or Waterproof Impregnation 515, 580
Wear Resistance of Textiles: New Apparatus for 386
Weighted Dyed Silk: Modified Method for the Determination of—by Ashing 386
Silk: Analysis of. I, II 43, 115
Sizes: Application of 420
Weighting and Fillers Piece Goods 40
and Filling Wool Textiles 40
Silk and Rayon: Improved Methods of 343
Wet Cleaning, Dry Cleaning and Dyeing 302
Wetting Agents: Apparatus for Rapid Determination of Surface Tension and Activity of 578
-out Agents Used in Mercerizing 513
Whiteness: Influence of Bleaching on the 257
Wild Flowers: Dyeing with 347
Wood or Cotton Cellulose 213
Wool: Absorption of Acid by 421
and Collagen: Amino Nitrogen Contents of 416
and Mildew 216
and Silk: Dyeing of Mixed Textiles of 425
and Textile Fibres: New Method of Objectively Determining the Fineness of 43
Bleaching—with Hydrogen Peroxide 422
Carbonizing Project: Review of. IV, V 417
Causes and Prevention of Mildew on 39
Chemical Testing of 218
Chlorination and Deterioration of 343, 416
Damage: Physico-chemical Methods 516
Damages in 300
to—Caused by Acids 343
Deterioration of—by Acids 116
Determination of Fineness, Length and Crimp of Combed—and Qualitative Listing of 43
of Soluble Nitrogen in 343
of Sulfuric Acid in 516
of Sulphur and Sulphate in 164
Effect of Alkalies on 571
of Sodium Hydroxide on 417
of Temperature on Moisture Regain of 569
Electrolytic Determination of Sulfur in 386
Fabrics: Chemical Investigation of Faults .. 469
Fast Green Dyeing on—with Schaeffer Salt 259
Fibre: Chemical Treatments of. I, II, III 302, 418
Fibres: Determination of Degree of Carbonization of 428
Effect of Heat on 570
Simplified Analysis for Dyes on 514
Fineness in Staples 571
Frosted 510
Grease: Uses of 516
Hairs: Changes Undergone by— 216
Halogenation of 467
Hydrolysis of 40
Iodine Number of 299
Isoelectric Point of 417
Its Hygienic Characteristics 570
Keratin: Alkaline Decomposition of 570
Titration Curve of 418
Logwood Black on 259
Manufacture of Artificial 570
Mildew of 468
Preservation of—Against Harmful Insects .. 570
Preservatives: Practical Experiences with ... 418
Processes in Reaction of Halogens Upon 513
Resistance to Tearing and Tensile Strength of—Treated with Chemical Reagents ... 216
Scouring 418
Solubilized Vat Dyes for 513
Some Relationships Between the Chemical Constitution and Leveling Properties of Acid Dyes as Applied to 514
Sulfur in 111
Textiles: Filling and Weighting 40
Tops: Determination of Fineness and Length in 387
Treatment of—in One Operation Before Carbonizing 572
Twists 420
Value of pH Control in Preparing—for Dyeing 383
Yarns and Fibres: Unshrinkable 380
-yarn Dyeing and Slubbing 385
Woolen and Semi-woolen Goods: Washing of Dyed 160
Results Obtained with Alcohol Sulfonates in Felting and Washing of 159
Pieces: Defatting and Rinsing of 423

PAGE

Rinsing and Washing 257
Raincoat Textiles: Manufacture of Pure 421
Wools: Freezing Process for Cleaning 510
Worsted-drawing Steps: Fallacy in Excess 344

Y

Yarn and Twist Number by Graphical Means ... 162
Conditioning 421
-dyeing Machines: Rapid and Even Dyeing on 385
Friction Tests 387
Regularigraph for 387
Statistical View of Variation in 421
Yarns and Cloths: Measurement of Electrical Resistance of 472
and Films of Cellulose Acetate 44
for Textures and Weaving: Method for the Determination of Covering Power of ... 44
Yellow Silk: Bleaching of—in the Bast 218

Research Reports and Articles

Subject Index

PAGE

Adsorption of Carbon Dioxide and of Water Vapor by Paper Pulp 493
B. W. I. R. A. Non-shrinkable Wool Process ... 252
Comments on Lee's Study of Cotton Spinning Irregularities 340
Critical Study of Cotton Manufacturing Processes 167, 326
Cross-sectioning Device: New 580
Degradation of Silk Fibroin by Acid and Alkali 460
Deterioration of Silks by Light of Different Wavelengths 231
Determination of Fibre Fineness and Cross-sectional Variability 184
Diameter Ratio of Silk Filaments as Related to Two-tone Dyeing 223
Dichroism of Dyed and Stretched Wool Fibre and Its Use in Revealing Structure 538
Dichroism of Dyed Fibres as a Means of Studying Micellar Arrangement 105
Disposal and Recovery of Textile Waste Liquors 3, 240
Dynamic Properties of Filamentous Materials: Some 519
Effect of Wear and Laundering on Cotton Sheeting 263
Essentials of Scientific Research Interpretation .. 58
Importance of Interpretation of Scientific Textile Research 53
Interpretation of Data Obtained with Spectrophotometers of the Polarizing Type 391
Methylene Blue Absorption as a Quantitative Measure of Wool Damage 149
Micro-Analysis of Textile Fibres. II, III, IV 75, 275, 307, 351, 431
Microbiology of Textile Fibres. II, III, IV 11, 542
Micro-Determination of Cotton Fibre Maturity in Polarized Light 370
Polarizing Microscope: Use of—in Cotton Classing 72
Relation of Orientation to Physical Properties of Cottons and Rayons 483
Silk Degumming. I, II, III 92, 134, 191
Silk Fibroin Dispergation 401
Testing the Crêpage of Yarns Before Weaving .. 32
Top-Quality Determinations: Note on Proposed Comparison Specifications for 337
Two-Tone Dyeing as Related to the Shape and Size of Silk Filaments 475
X-ray Analysis of Textile Fibres. III 119

Book Reviews

Subject Index

PAGE

A. A. T. C. C. 1933 Year Book 220
Advance of Science 304
Chemie der Organischen Farbstoffe 388
Cotton, from the Raw Material to the Finished Product 388
Cotton Year Book (English) 388
Jute and Substitutes 388
Rayon Dyeing and Finishing 388
Union-Management Co-operation in the "Stretch-Out" 220
Woolen and Worsted Raw Materials 388